



Update on . . . Gynecologic Cancer

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The focus of this column is to describe published research studies of interest to professional oncology nurses. This issue highlights two studies on gynecologic cancer.



Women's Sexual Health Should Be Post-Pelvic Radiation Priority

White, Faithfull, and Allan (2013) conducted a focused ethnographic study from the United Kingdom (U.K.) discussing factors influencing the clinical assessment and interventions of long-term sequela of radiotherapy (RT) for women with pelvic malignancies. Pelvic RT causes physical side effects as well as psychosocial responses that negatively impact the sexual health of women and their partners. The authors illustrated the lack of research and thorough clinical assessment available to manage patients long term. The rationale for the study was the existence of a significant population of two million cancer survivors in the U.K. (MacMillan Cancer Support, 2008). Epidemiologic data suggest that few clinical supports are in place for cancer survivors and, therefore, post-treatment quality-of-life (QOL) alterations are not addressed. Clinicians are known to focus on assessment and management of acute treatment-related side effects and are unaware of and reluctant to manage chronic, late, or long-term side effects. QOL and RT studies indicate that women receiving pelvic RT experience significant disruption to sexual well-being. Accurate data in this population do not exist because of minimal prevalence data about the sexual function of the general U.K. adult population.

White et al. (2013) contended that research has adopted an essentialist perspective in the study of sexual dysfunction, which has resulted in a neglect of psychological, relational, and social components of male and female long-term, treatment-related sexual side effects. Biologic determinism is identified as the first perspective to emerge in defining sexuality; however, the need to include Foucault's (1990a, 1990b)

theory of social construction, which accounts for the psychosocial effect of the anatomic and physiologic changes, is considered essential and is used as part of the framework of White et al.'s (2013) study.

The purpose of the study was to explore factors that influence clinical assessment and management of RT-induced sexual dysfunction and to illustrate the deficiencies of the multiprofessional team (e.g., physicians, nurses, radiotherapists, social workers) in providing quality time for discussion and to craft appropriate interventions during routine oncology follow-up. In addition, the article provided findings of biomedical (i.e., functional), socially constructed, and subjective elements of women's altered sexual lives following cancer treatment.

The study was conducted during a five-month period of participant observation of RT follow-up consultations (N = 69) from two National Health Service cancer centers and 49 in-depth participant interviews (24 women, 5 partners, 20 health professionals). The first theme that emerged was the culture of the clinic shaped by the biomedical model. Two subthemes evolved within that theme: fear of recurrence and limits of the biomedical gaze (only the physical examination, not any leading psychosocial questions posed by the team to assess sexual health). The second theme focused on the construction of female sexuality post-treatment, in which female sexuality was understood by clinicians and women through biologic and anatomic realities created by pelvic RT and sexual impact.

The study's findings explored factors that adversely affect delivery of sexual rehabilitation from a social, organizational, and patient and partner perspective following cancer. Clinicians practicing in inflexible, resource-limited systems with significant time constraints

are challenged to go beyond the pure physical assessment and needs of cancer survivors. The knowledge provided in the study is pivotal and extends beyond the clinical diagnosis of women with pelvic cancer. Sexual rehabilitation must be at the forefront of professional oncology nursing practice for all patient populations affected by acute and chronic sexual compromise related to cancer diagnosis and treatment. In addition, issues related to gender equity in this domain must be prioritized and pursued.

Foucault, M. (1990a). *The history of sexuality: An introduction* (vol. 1). London, England: Penguin Books.

Foucault, M. (1990b). *The care of the self: The history of sexuality*. London, England: Penguin Books.

Macmillan Cancer Support. (2008). *It's no life: Living with the long term effects of cancer*. London, England: Author.

White, I.D., Faithfull, S., & Allan, H. (2013). The re-construction of women's sexual lives after pelvic radiotherapy: A critique of social constructionist and biomedical perspectives on the study of female sexuality after cancer treatment. *Social Science and Medicine*, 76, 188-196. doi:10.1016/j.socscimed.2012.10.025

Lactation May Reduce Risk of Ovarian Cancer

Ovarian cancer is the seventh most common cause of cancer mortality among women, accounting for 4% of female cancers (Ferlay et al., 2010). Ovarian cancer usually is diagnosed in advanced stages. The overall five-year survival rate is about 45%, and possible causes have been linked to the turnover of surface ovarian epithelium during ovulation and increased proliferation of ovarian epithelium from elevated gonadotropin concentrations (Siegel, Naishadham, & Jemal, 2012). Two protective risk factors for ovarian cancer are oral contraceptive use and higher parity, which may reduce ovarian cancer risk by decreasing gonadotropin concentrations and suppressing ovulation (Milne et al., 2010). Breastfeeding delays ovulation and inhibits the release of reproductive hormones implicated in ovarian cancer (McNeilly, 2001).

The goal of Su, Pasalich, Lee, and Binns' (2013) study was to investigate the association between lactation and the risk of ovarian cancer among southern Chinese women. The case-control study was conducted in Guangzhou, Guang-Dong Province, from August 2006 to July 2008. A questionnaire was used to assess the time (months) of lactation and number of children breastfed in a sample of 493 patients with ovarian cancer and 472 hospital-based controls. Logistic regression analyses were used to assess the association between breastfeeding and the concomitant risk of ovarian cancer. Although a potential biologic mechanism for the protective implications of prolonged lactation on ovarian cancer exists, the literature is inconsistent. Evidence demonstrates a reduced risk among women who have breastfed. In some case-control studies, inverse associations have been shown between duration of breastfeeding and ovarian cancer risk; however, some studies do not show an association (Jordan, Siskind, Green, Whiteman, & Webb, 2010). In China, the incidence of ovarian cancer is relatively low (3.8 per 100,000 people) compared to Europe (10.1 per 100,000 people) (Ferlay et al., 2010). The incidence of ovarian cancer has increased in China, which may be a consequence of the aging population. Therefore, the authors conducted this study to validate the potential of breastfeeding as a protective factor in ovarian cancer development. The case-control study investigated the association between the risk of epithelial ovarian cancer and duration of lactation, number of children breastfed, and the average duration of lactation per child among southern Chinese women.

Participants were recruited from four public hospitals. Eligibility included a diagnosis of an incident, histopathologically confirmed epithelial ovarian tumor within the past year. In the study, the number of children breastfed coupled with the duration of breastfeeding were inversely associated with ovarian cancer risk. Significant inverse dose-response relations were found for duration of lactation and the number of children breastfed. The adjusted odds ratios were 0.09 (95% confidence interval [CI] [0.04, 0.19]) for women with 31 months or more of total lactation and those with 10 months or less of lactation, and 0.38 (95% CI [0.27, 0.55]) for women with three or more breastfed children compared with those with one breastfed child. These findings are consistent with a similar study conducted by the same researchers in a neighboring province in China (Zhang, Xie, Lee, & Binns, 2004). The researchers found that prolonged lactation protected against ovarian cancer in this population of Chinese women. The authors cited additional studies that support the theory that lactation has a protective effect on the ovaries and is a significant variable to lower risk of developing cancer. Lactation may influence ovarian cancer development by reducing the number of ovulatory cycles. The results agree with national guidelines and promote the maternal benefits of breastfeeding. Because of the limited amount of research from countries with low incidences of ovarian cancer, this study provides important prevention data. Ovarian cancer commonly presents in advanced stages with few warning signs, so this study is important because it provides potential prevention indicators for this cancer and promotes research in the field of global women's health.

- Ferlay, J., Shin, H., Bray, F., Forman, D., Mathers, C., & Parkin, D. (2010). Cancer incidence and mortality worldwide. Retrieved from <http://www.iarc.fr/en/media-centre/iarcnews/2010/globocan2008.php>
- Jordan, S.J., Siskind, V, Green, A.C., Whiteman, D.C., & Webb, P.M. (2010). Breast feeding and risk of epithelial ovarian cancer. *Cancer Causes and Control*, 21, 109–116. doi:10.1007/s10552-009-9440-x
- McNeilly, A.S. (2001). Lactational control of reproduction. *Reproduction, Fertility, and Development*, 13, 583–590.
- Milne, R.L., Osorio, A., Ramón y Cajal, T., Baiget, M., Lasa, A., Diaz-Rubio, E., . . . Benitez, J. (2010). Parity and the risk of breast and ovarian cancer in BRCA1 and BRCA2 mutation carriers. *Breast Cancer Research and Treatment*, 119, 221–232. doi:10.1007/s10549-009-0394-1
- Siegel, R., Naishadham, D., & Jemal, A. (2012). Cancer statistics, 2012. *CA: A Cancer Journal for Clinicians*, 62, 10–29. doi:10.3322/caac.20138
- Su, D., Pasalich, M., Lee, A.H., & Binns, C.W. (2013). Ovarian cancer risk is reduced by prolonged lactation: A case-control study in southern China. *American Journal of Clinical Nutrition*, 97, 354–359. doi:10.3945/ajcn.112.044719
- Zhang, M., Xie, X., Lee, A.H., & Binns, C.W. Prolonged lactation reduces ovarian cancer risk in Chinese women. *European Journal of Cancer Prevention*, 13, 499–502.

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